

**ABSTRACT****A ROTARY MACHINE HAVING MAGNETS OF DIFFERENT COMPOSITIONS**

5 A rotary electrical machine, especially an alternator or an alternator-starter for a motor vehicle, comprises a stator (S), a rotor (R) and permanent magnets incorporated in the rotor and/or the stator, in which the said magnets are formed into at least two groups each of which is defined by a specific type of composition, with each sub-assembly being a combination of a magnet containing rare earths with  
10 a ferrite magnet, at least one of the magnets being arranged radially so as to generate an orthoradial magnetic flux.

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**[Figure 5]**